Charleston Air Force Base Installation Restoration Program Charleston AFB, South Carolina

Statement of Basis – SWMU 56 – Fire Demonstration Area No. 1

INTRODUCTION

Charleston Air Force Base (Charleston AFB or the Base) is located in Charleston County, approximately 10 miles northwest of Charleston, South Carolina (Figure 1). The Base comprises approximately 3,731 acres of contiguous property and has a population of approximately 8,500. The host command at Charleston AFB is the 628th Air Base Wing (ABW), whose primary mission is to maintain immediate airlift capability to deliver and sustain air and combat forces at combat locations. During peacetime, operations include re-supply of overseas American embassies and military installations and supply of aid to natural disaster areas.

This Statement of Basis (SoB) explains the rationale for the proposed remedy that no further action (NFA) is required at Solid Waste Management Unit (SWMU) 56 – Fire Demonstration Area No. 1, at Charleston AFB. This document is intended to inform the general public of the remedy proposed for SWMU 56. This document provides information on how the public can be involved in the remedy selection process. The South Carolina Department of Health and Environmental Control (SCDHEC) will not finalize this proposed remedy until the public comment period has ended and all information submitted during the public comment period has been reviewed and considered.

This SoB should not be considered the primary source of information for this site. The SoB summarizes information that can be found in greater detail in the following documents:

- Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Report for SWMU 56; Tetra Tech NUS, Inc. 1995.
- Data Gap Investigation Report for SWMUs 28, 31, and 56, Tetra Tech, 2010.

The RFI and other documents supporting this determination can be found in the Administrative Record at Charleston AFB and the SCDHEC office located in Columbia, South Carolina.

PROPOSED REMEDY

The recommended alternative for SWMU 56 is NFA because of the absence of contamination observed in the soil and groundwater samples collected during the RFI and data gap investigation.

SITE BACKGROUND

Description

SWMU 56 is an inactive unit located on the east side of the intersection of Runway 03-21 and the Center Taxiway (Figure 2) at Charleston AFB. There was no visual evidence of the site during the visual inspection in 1992, and the fuel application and extinguishing methods are not known. This site may also receive runoff from the nearby runway. There is an intermittent stream just to the south of the site, and the local topography slopes toward this stream. The site is a grassy area and was used for approximately 6 fire extinguishing demonstrations from 1963 through 1966, with approximately 500 gallons of JP-4 jet fuel used for each fire demonstration.

Investigations

During the RFI, three soil borings, 56-SU-SB01, 56-SU-SB02, and 56-SU-SB03, were installed, with 56-SU-SB01 subsequently converted to monitoring well 56-MW-01 (Figure 2). The soil samples were analyzed for VOCs, SVOCs, PCBs, TPH, and inorganics. Acetone was the only VOC detected, and it was found in all three samples. Di-n-butylphthalate was detected in 56-SU-SB02 and 56-SU-SB03. Several metals were detected in all three soil samples. One groundwater sample was collected and analyzed for VOCs, SVOCs, PCBs, TPH, and metals. Metals were the only parameters detected in the groundwater sample.

In 2009, soil and groundwater sampling was conducted at the site to further characterize the nature and extent of contamination. Four surface soil and four subsurface soil samples were collected at the site along with 3 groundwater samples. No contamination was identified that would pose an risk to human health and the environment.

SITE RISK

A baseline human health risk assessment was not performed for this SWMU because of the absence of contamination in the soils and groundwater observed in the samples collected at the site.

STATUTORY AUTHORITIES

This document is being issued in accordance with 40 CFR, in compliance with Federal hazardous waste management requirements. The Charleston AFB Corrective Action Program is conducted under the authority of Sections 3004(u), 3004(v), 3005(c)(3), 3008(h), 3013, 6001, and 7533 of RCRA (42 U.S.C 6901 et seq.) as amended by the Hazardous & Solid Waste Amendment (HSWA) of 1984 (Pub. L. No. 98-616, 98 Stat. 3221) and the Federal Facility Compliance Act of 1992 (FFCA) (Pub. L. 102-386, 106 Stat. 1505). This SoB is part of the corrective action process and is a requirement of the HSWA Corrective Action Permit, referred to as the HSWA permit, issued to Charleston AFB by SCDHEC.